6" Bench Grinder
(Model GR100 and GR150)

INSTRUCTION MANUAL

GR150

GR100

PART NO. A13267 - 07-12-05 Rev. A
Copyright © 2005 Delta Machinery

DELTA® ShopMaster™

To learn more about DELTA MACHINERY
visit our website at: **www.deltamachinery.com.**

ESPAÑOL: PÁGINA 15

For Parts, Service, Warranty or other Assistance,

please call 1-800-223-7278 (In Canada call 1-800-463-3582).

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS 2
SAFETY GUIDELINES 3
GENERAL SAFETY RULES 4
ADDITIONAL SPECIFIC SAFETY RULES 5
FUNCTIONAL DESCRIPTION 7
CARTON CONTENTS 8
ASSEMBLY 9
OPERATION 10
TROUBLESHOOTING 12
MAINTENANCE 12
SERVICE 13
ACCESSORIES 13
WARRANTY 14
ESPAÑOL 15

IMPORTANT SAFETY INSTRUCTIONS

⚠WARNING Read and understand all warnings and operating instructions before using any tool or equipment. When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. Delta Machinery strongly recommends that this product NOT be modified and/or used for any application other than for which it was designed.

If you have any questions relative to its application DO NOT use the product until you have written Delta Machinery and we have advised you.

Online contact form at **www.deltamachinery.com**

Postal Mail: Technical Service Manager
Delta Machinery
4825 Highway 45 North
Jackson, TN 38305
(IN CANADA: 125 Mural St. Suite 300, Richmond Hill, ON, L4B 1M4)

Information regarding the safe and proper operation of this tool is available from the following sources:

Power Tool Institute
1300 Sumner Avenue, Cleveland, OH 44115-2851
www.powertoolinstitute.org

National Safety Council
1121 Spring Lake Drive, Itasca, IL 60143-3201

American National Standards Institute, 25 West 43rd Street, 4 floor, New York, NY 10036 **www.ansi.org**
ANSI 01.1Safety Requirements for Woodworking Machines, and

the U.S. Department of Labor regulations **www.osha.gov**

SAVE THESE INSTRUCTIONS!

SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION Used without the safety alert symbol indicates potentially hazardous situation which, if not avoided, may result in property damage.

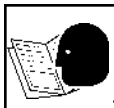
CALIFORNIA PROPOSITION 65

⚠WARNING **SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES** contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

· lead from lead-based paints,
· crystalline silica from bricks and cement and other masonry products, and
· arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, always wear **NIOSH/OSHA** approved, properly fitting face mask or respirator when using such tools.

GENERAL SAFETY RULES



⚠WARNING READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage.

IMPORTANT SAFETY INSTRUCTIONS

1. **FOR YOUR OWN SAFETY, READ THE INSTRUCTION MANUAL BEFORE OPERATING THE MACHINE.** Learning the machine's application, limitations, and specific hazards will greatly minimize the possibility of accidents and injury.
2. **WEAR EYE AND HEARING PROTECTION. ALWAYS USE SAFETY GLASSES.** Everyday eyeglasses are NOT safety glasses. USE CERTIFIED SAFETY EQUIPMENT. Eye protection equipment should comply with ANSI Z87.1 standards. Hearing equipment should comply with ANSI S3.19 standards.
3. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
4. **DO NOT USE THE MACHINE IN A DANGEROUS ENVIRONMENT.** The use of power tools in damp or wet locations or in rain can cause shock or electrocution. Keep your work area well-lit to prevent tripping or placing arms, hands, and fingers in danger.
5. **MAINTAIN ALL TOOLS AND MACHINES IN PEAK CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Poorly maintained tools and machines can further damage the tool or machine and/or cause injury.
6. **CHECK FOR DAMAGED PARTS.** Before using the machine, check for any damaged parts. Check for alignment of moving parts, binding of moving parts, breakage of parts, and any other conditions that may affect its operation. A guard or any other part that is damaged **should be properly repaired or replaced.** Damaged parts can cause further damage to the machine and/or injury.
7. **KEEP THE WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
8. **KEEP CHILDREN AND VISITORS AWAY.** Your shop is a potentially dangerous environment. Children and visitors can be injured.
9. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure that the switch is in the "OFF" position before plugging in the power cord. In the event of a power failure, move the switch to the "OFF" position. An accidental start-up can cause injury.
10. **USE THE GUARDS.** Check to see that all guards are in place, secured, and working correctly to reduce the risk of injury.
11. **REMOVE ADJUSTING KEYS AND WRENCHES BEFORE STARTING THE MACHINE.** Tools, scrap pieces, and other debris can be thrown at high speed, causing injury.
12. **USE THE RIGHT MACHINE.** Don't force a machine or an attachment to do a job for which it was not designed. Damage to the machine and/or injury may result.
13. **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause damage to the machine or injury to the user.
14. **USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. See the Extension Cord Chart for the correct size depending on the cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
15. **SECURE THE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. Loss of control of a workpiece can cause injury.
16. **FEED THE WORKPIECE AGAINST THE DIRECTION OF THE ROTATION OF THE BLADE, CUTTER, OR ABRASIVE SURFACE.** Feeding it from the other direction will cause the workpiece to be thrown out at high speed.
17. **DON'T FORCE THE WORKPIECE ON THE MACHINE.** Damage to the machine and/or injury may result.
18. **DON'T OVERREACH.** Loss of balance can make you fall into a working machine, causing injury.
19. **NEVER STAND ON THE MACHINE.** Injury could occur if the tool tips, or if you accidentally contact the cutting tool.
20. **NEVER LEAVE THE MACHINE RUNNING UNATTENDED. TURN THE POWER OFF.** Don't leave the machine until it comes to a complete stop. A child or visitor could be injured.
21. **TURN THE MACHINE "OFF", AND DISCONNECT THE MACHINE FROM THE POWER SOURCE** before installing or removing accessories, before adjusting or changing set-ups, or when making repairs. An accidental start-up can cause injury.
22. **MAKE YOUR WORKSHOP CHILDPROOF WITH PADLOCKS, MASTER SWITCHES, OR BY REMOVING STARTER KEYS.** The accidental start-up of a machine by a child or visitor could cause injury.
23. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE. DO NOT USE THE MACHINE WHEN YOU ARE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.** A moment of inattention while operating power tools may result in injury.
24. **⚠WARNING USE OF THIS TOOL CAN GENERATE AND DISBURSE DUST OR OTHER AIRBORNE PARTICLES, INCLUDING WOOD DUST, CRYSTALLINE SILICA DUST AND ASBESTOS DUST.** Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

ADDITIONAL SPECIFIC SAFETY RULES

⚠WARNING FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS INJURY.

1. **DO NOT OPERATE THIS MACHINE** until it is completely assembled and installed according to the instructions. A machine incorrectly assembled can cause serious injury.
2. **OBTAIN ADVICE** from your supervisor, instructor, or another qualified person if you are not thoroughly familiar with the operation of this machine. Knowledge is safety.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections to prevent shock or electrocution.
4. **ALWAYS USE THE PROVIDED BLOTTER AND WHEEL FLANGES** to mount the grinding wheels on the grinder shaft to prevent wheel damage or accidental separation. Separation can result in fragments flying off the wheel at high speeds.
5. **USE ONLY WHEELS** suitable for the speed of the machine. Unsuitable grinding wheels can come apart, throwing fragments out at high speeds.
6. **USE ONLY WHEELS** that have a bore exactly equal to the arbors of the machine. Never attempt to machine an undersized wheel to fit an arbor. Unsuitable grinding wheels can come apart, throwing fragments out at high speeds.
7. **DO NOT OVERTIGHTEN WHEEL NUT.**
8. **DO NOT USE A WHEEL THAT VIBRATES.** Dress the grinding wheel, replace it, or replace the bearings of the shaft. Unsuitable grinding wheels can come apart, throwing fragments at high speeds.
9. **INSPECT WHEELS** before starting the machine for cracks or fragments. **REPLACE DAMAGED WHEELS** immediately. Parts of the wheel can be thrown at high speeds causing serious injury.
10. **ADJUST EYE SHIELDS** close to the grinding wheel, and re-adjust as the wheel wears down. Flying sparks are dangerous and can cause fires or explosions.
11. **ALWAYS MAKE SURE** the eye shields are in place, properly adjusted, and secured.
12. **ADJUST TOOL RESTS** close to the grinding wheel (1/8" separation or less). Tighten the tool rest securely to prevent shifting positions, and re-adjust as the wheel wears down. The workpiece can be drawn into the wheel, causing damage to the workpiece and/or serious injury.
13. **STAND TO ONE SIDE** before turning the machine "ON". Loose fragments or wheel parts could fly from the wheel at high speeds.
14. **NEVER GRIND ON A COLD WHEEL.** Run the grinder for one full minute before applying the workpiece. A cold wheel has a tendency to chip. Those fragments could fly from the wheel at high speeds.
15. **NEVER START THE MACHINE** with the workpiece against the grinding wheel. The workpiece can be drawn into the wheel, causing damage to the machine and/or serious injury.
16. **CLEAN THE MACHINE** thoroughly when processing different types of workpieces (wood, steel, or aluminum). Combining wood and metal dust can create an explosion or fire hazard. **DO NOT GRIND OR POLISH MAGNESIUM**. Fire will result.
17. **NEVER GRIND NEAR FLAMMABLE GAS OR LIQUIDS.** Sparks can create a fire or an explosion.
18. **AVOID AWKWARD OPERATIONS AND HAND POSITIONS.** A sudden slip could cause a hand to move into the grinding wheel.
19. **KEEP ARMS, HANDS, AND FINGERS** away from the wheel. The abrasive surfaces can cause serious injury.
20. **HOLD THE WORKPIECE FIRMLY** against the tool rest. Loss of control of the workpiece can cause serious injury.
21. **DRESS THE WHEEL** on the face only. Dressing the side of the wheel could cause it to become too thin for safe use.
22. **GRIND A WORKPIECE** using the face of the grinding wheel only. Loss of control of the workpiece can cause serious injury.
23. **NEVER APPLY COOLANT** directly to the grinding wheel. Coolant can weaken the bonding strength of the grinding wheel and cause it to fail. Dip the workpiece in water to cool it.
24. **DO NOT TOUCH** the ground portion of a workpiece until it has cooled sufficiently. Grinding creates heat.
25. **PROPERLY SUPPORT LONG OR WIDE WORKPIECES.** Loss of control of the workpiece can cause serious injury.
26. **NEVER PERFORM LAYOUT, ASSEMBLY,** or set-up work on the table/work area when the machine is running. A sudden slip could cause a hand to move into the wheel. Severe injury can result.
27. **TURN THE MACHINE "OFF",** disconnect the machine from the power source, and clean the table/work area before leaving the machine. Someone else might accidentally start the machine and cause serious injury to themselves.
28. **ADDITIONAL INFORMATION** regarding the safe and proper operation of power tools (i.e. a safety video) is available from the Power Tool Institute, 1300 Sumner Avenue, Cleveland, OH 44115-2851 (www.powertoolinstitute.com). Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

SAVE THESE INSTRUCTIONS.
Refer to them often
and use them to instruct others.

POWER CONNECTIONS

A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the machine's plug. Before connecting the machine to the power line, make sure the switch (s) is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the machine.

⚠DANGER **DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.**

MOTOR SPECIFICATIONS

Your machine is wired for 120 Volts, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS

⚠DANGER **THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

1. All grounded, cord-connected machines:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the machine's plug, as shown in Fig. A.

Repair or replace damaged or worn cord immediately.

2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating less than 150 volts:

If the machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. A**,** the machine will have a grounding plug that looks like the plug illustrated in Fig. A**.** A temporary adapter, which looks like the adapter illustrated in Fig. B, may be used to connect this plug to a matching 2-conductor receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. Whenever the adapter is used, it must be held in place with a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

⚠DANGER **IN ALL CASES, MAKE CERTAIN THAT THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.**

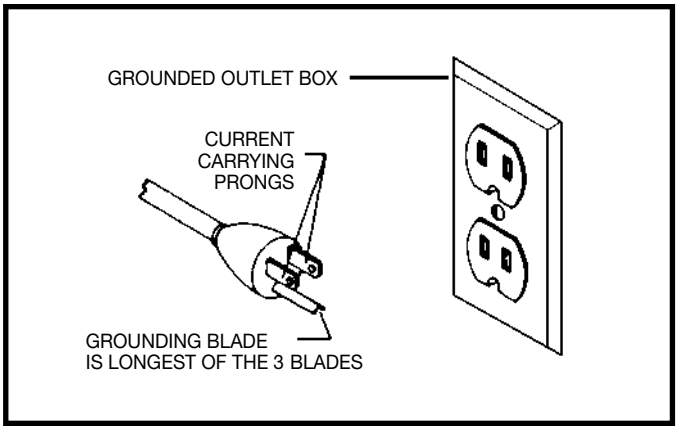


Fig. A

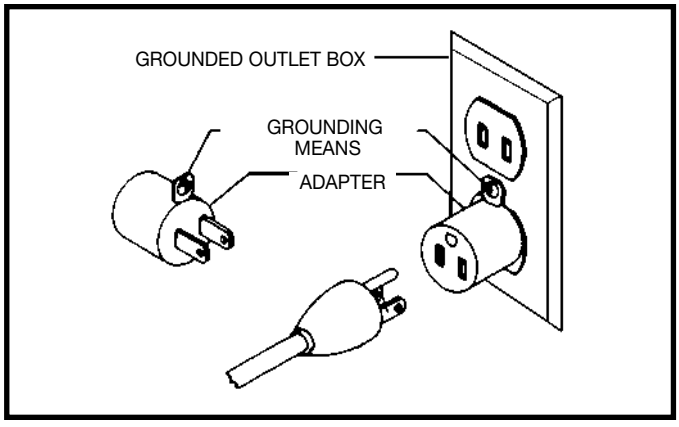


Fig. B

EXTENSION CORDS

⚠WARNING Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and matching receptacle which will accept the machine's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the machine. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. D-1 shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE EXTENSION CORD

RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC MACHINES

Ampere Rating	Volts	Total Length of Cord in Feet	Gauge of Extension Cord
0-6	120	up to 25	18 AWG
0-6	120	25-50	16 AWG
0-6	120	50-100	16 AWG
0-6	120	100-150	14 AWG
6-10	120	up to 25	18 AWG
6-10	120	25-50	16 AWG
6-10	120	50-100	14 AWG
6-10	120	100-150	12 AWG
10-12	120	up to 25	16 AWG
10-12	120	25-50	16 AWG
10-12	120	50-100	14 AWG
10-12	120	100-150	12 AWG
12-16	120	up to 25	14 AWG
12-16	120	25-50	12 AWG
12-16	120	GREATER THAN 50 FEET NOT RECOMMENDED	

FUNCTIONAL DESCRIPTION

FOREWORD

The Delta ShopMaster Model GR100 is a 6" Bench Grinder. This machine comes with adjustable tool rests and two large eye shields for added safety. The GR150 is the same, but it also comes with a flexible lamp.

NOTICE: The photo on the manual cover illustrates the current production model. All other illustrations contained in the manual are representative only and may not depict the actual labeling or accessories included. These are are intended to illustrate technique only.

CARTON CONTENTS

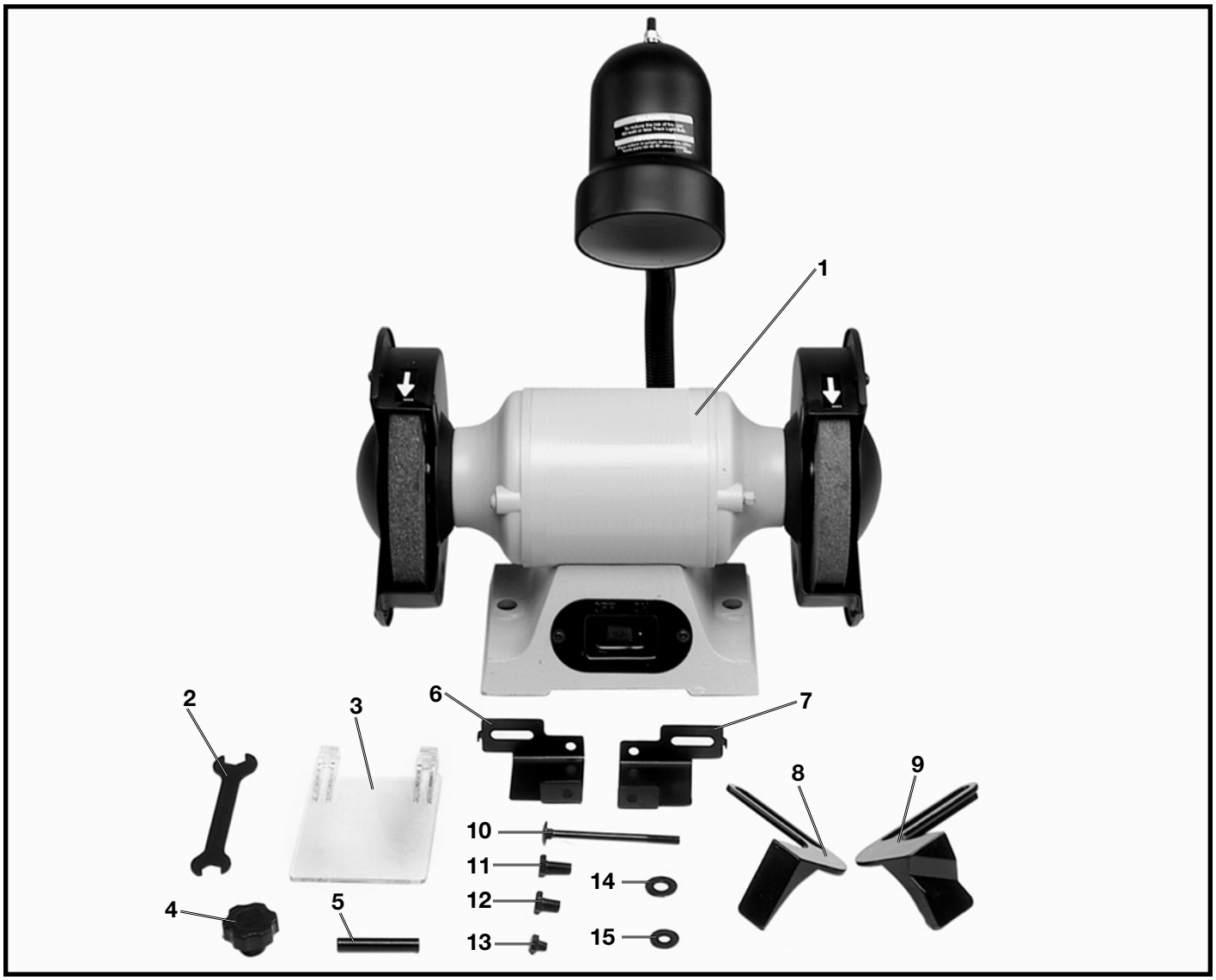


Fig.1

1. Grinder (GR150 pictured)
2. Wrench
3. Eye shield (2)
4. Eye shield knob (2)
5. Eye shield bushing (2)
6. Left side spark guard
7. Right side spark guard
8. Left side tool rest
9. Right side tool rest with V-groove
10. Eye shield bolt (2)
11. 5/16-18x5/8" Hex head screw (2)
12. 5/16-18x1/2" Hex head screw (2)
13. 1/4-20x1/4" Hex head screw (2)
14. 3/4" Flat washer (4)
15. 6.4mm Flat washer (4)

UNPACKING AND CLEANING

Carefully unpack the machine and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality household floor paste wax.

ASSEMBLY

⚠WARNING For your own safety, do not connect the machine to the power source until the machine is completely assembled and you read and understand the entire instruction manual.

ASSEMBLY TOOLS REQUIRED

5/16" Wrench
1/4" Wrench

ASSEMBLY TIME ESTIMATE

Assembly for this machine takes approximately 30 minutes.

TOOL RESTS

1. Assemble the v-grooved tool rest (A) Fig. 3, to the inside of the right wheel guard using two 3/4" flat washers (C), and two 5/16-18x5/8" hex head screws (B).
2. Assemble the remaining flat surfaced tool rest (D) Fig. 4, to the inside of the left wheel guard in the same manner using two 3/4" flat washers (C), and two 5/16-18x1/2" hex head screws (E).
3. Each tool rest is adjustable so that the edge (F) Fig. 4, of the tool rest can be positioned as close to the grinding wheel (G) as possible giving maximum support to the piece that is being ground. A distance of 1/8" or less between the grinding wheel (G) and the edge (F) of the tool rest should always be maintained. As the grinding wheel wears down to a smaller diameter, re-adjust the tool rest closer to the wheel. The tool rest should be adjusted so it is set a little below the center of the wheel. This is the most practical and safest position for general work. Free-hand grinding without the use of the tool rest should always be done on the lower quarter of the wheel.

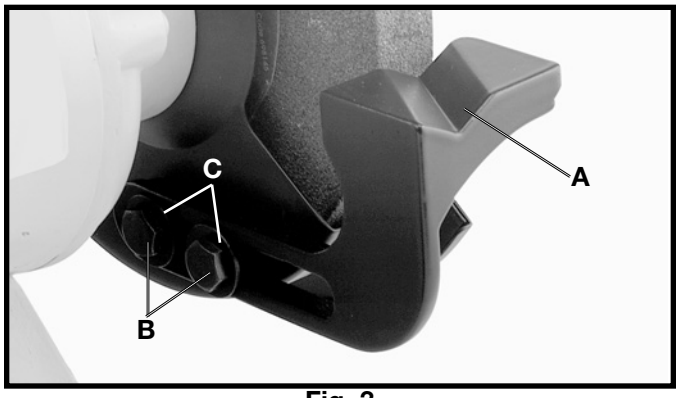


Fig. 3

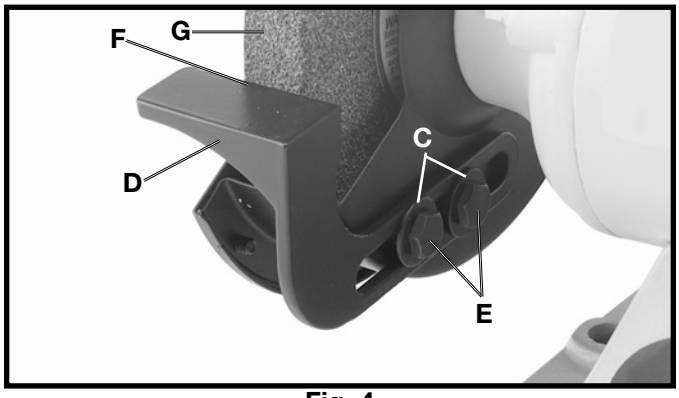


Fig. 4

SPARK GUARDS

The spark guard (A) Fig. 5, is mounted to the side of each wheel guard, using a 6.4mm flat washer (C) and a 1/4-20x1/4" hex head screw (B) as shown. **NOTE: The tab (D) Fig. 5, on the side of the spark guard (A), must be placed in slot (E), before attaching the spark guard (A) to the grinder.** The spark guard (A) should be adjusted as close as possible to the grinding wheel so that sparks never strike the operator's hand. As the wheels wear down, the spark guard (A) should be adjusted accordingly.

EYE SHIELDS

Your grinder is supplied with two eye shields for operator protection. **NOTE: ALWAYS WEAR EYE PROTECTION.** To assemble the eye shields, proceed as follows:

1. Place the eye shield (A) on the spark guard as shown in Fig. 6.

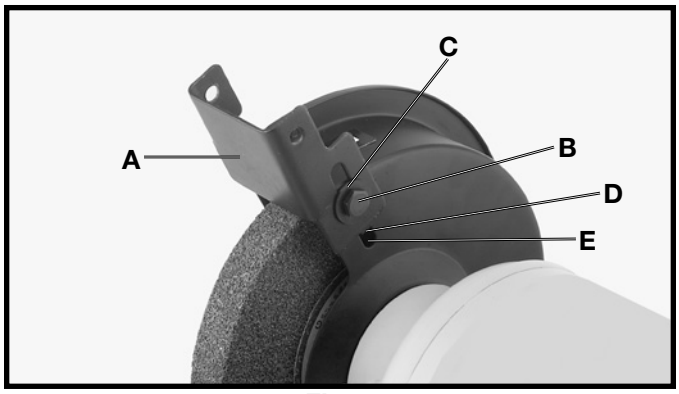


Fig. 5

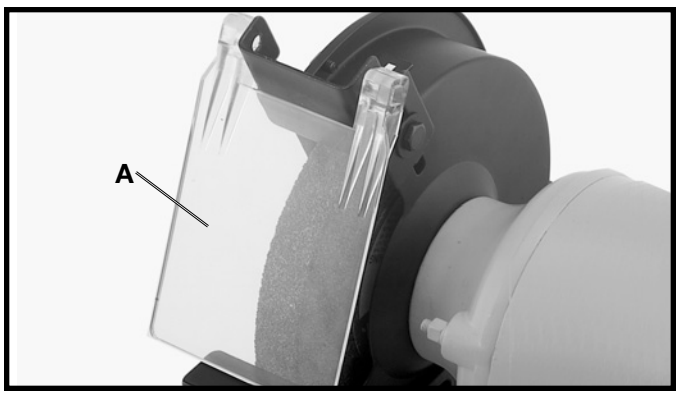


Fig. 6

2. Align the holes in the eye shield with the holes in the spark guard and place the eye shield bushing (A) Fig. 7, in between the space in the spark guard.
3. Insert the eye shield bolt (A) Fig. 8, through the hole in the eye shield (B), eye shield bushing (C), and spark guard (D).
4. Place an 6.4mm flat washer (E) Fig. 8, onto the end of the eye shield bolt and fasten the eye shield knob (F) to the end of the eye shield bolt.
5. Assemble the other eye shield in the same manner.

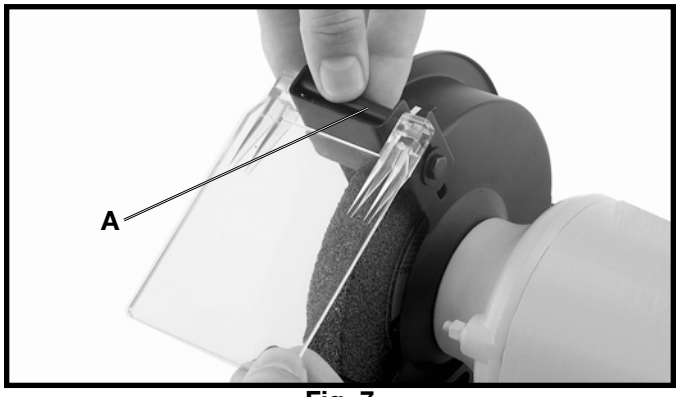


Fig. 7

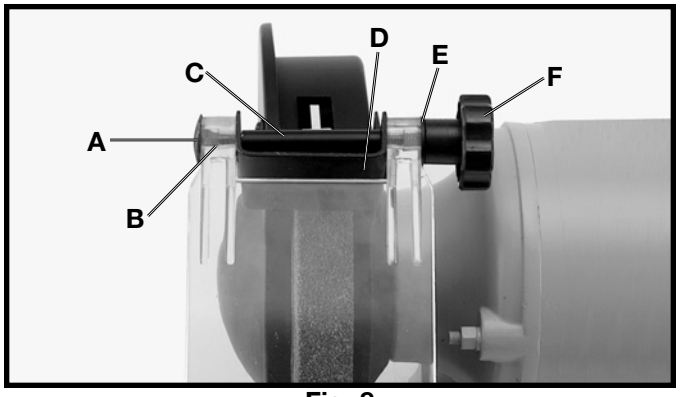


Fig. 8

FASTENING GRINDER TO SUPPORTING SURFACE

⚠WARNING If, during operation, there is any tendency for the grinder to tip over, slide, or "Walk", the grinder must be secured to the supporting surface using fasteners (not supplied) through the two holes (A) Fig. 9 in the grinder base.

Fig. 9

OPERATION

OPERATIONAL CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING GRINDER

The switch (A) Fig. 10, is located on the front of the grinder. To turn the grinder "ON" move the switch right to the "ON" position. To turn the grinder "OFF" move the switch left to the "OFF" position.

⚠WARNING Make sure that the switch is in the "OFF" position before plugging in the power cord. In the event of a power failure, move the switch to the "OFF" position. An accidental start-up can cause injury.

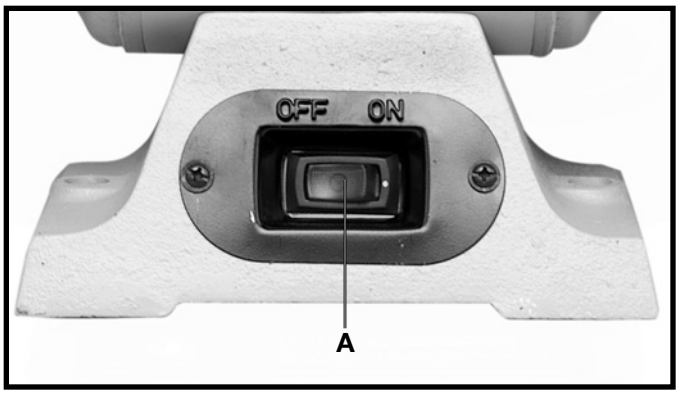


Fig. 10

FLEXIBLE LAMP (GR150 ONLY)

The flexible lamp operates independently of the grinder. To turn the lamp on and off, rotate switch (A) Fig. 11.

WARNING: To reduce the risk of fire, use 40 watt or less, 120 volt, reflector track type light bulb (not supplied). A standard household light bulb should not be used. The reflector track type light bulb should not extend below the lamp shade.

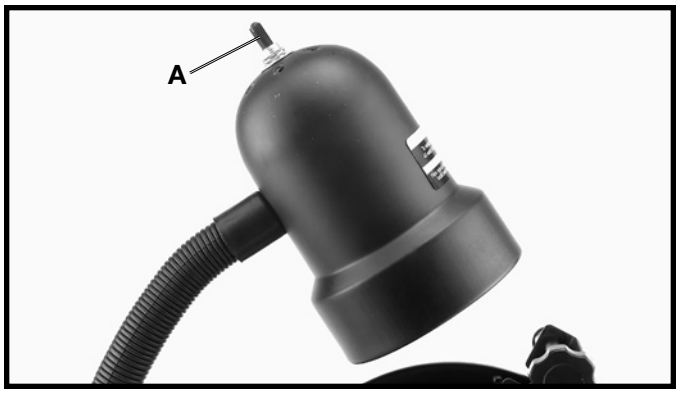


Fig. 11

MACHINE USE

⚠WARNING Keep the spark guards and eye shields in place at all times.

Figures 12, 13, and 14 illustrate several typical operations that can be accomplished using the grinder. Each tool rest should be positioned a little below the center of the grinding wheel and adjusted so that the edge of the tool rest is a distance of 1/8” or less from the wheel. This will provide maximum support to the workpiece and is the safest position for general work.

As the grinding wheel wears down, readjust the tool rest closer to the grinding wheel. Always maintain a distance of 1/8" or less between the grinding wheel and the edge of the tool rest. Free hand grinding (without the use of the tool rest) should always be done on the lower quarter of the grinding wheel. Read and follow all of the **safety rules** in this manual.

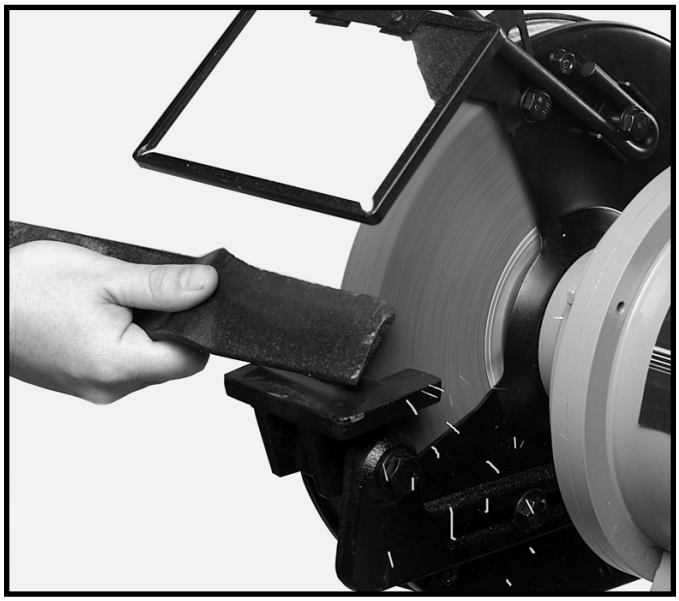


Fig. 12

Fig. 13

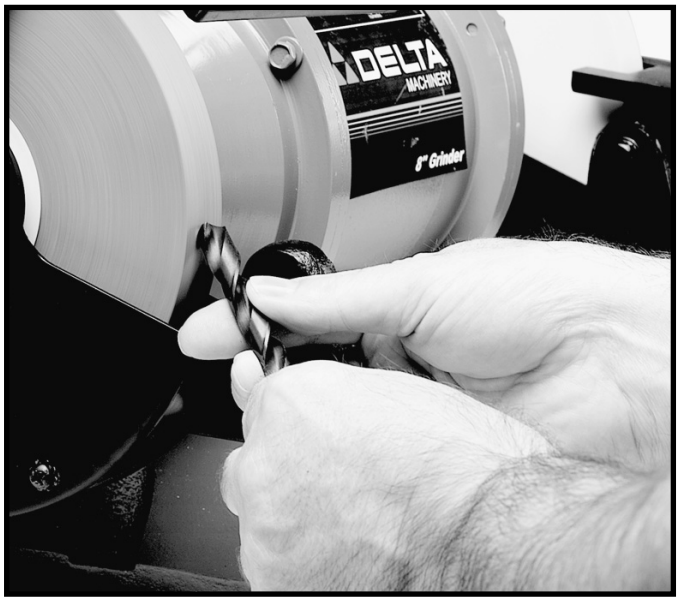


Fig. 14

TROUBLESHOOTING

For assistance with your machine, visit our website at **www.deltamachinery.com** for a list of service centers or call the DELTA Machinery help line at 1-800-223-7278 (In Canada call 1-800-463-3582).

MAINTENANCE

GRINDING WHEELS

WARNING: THE USE OF ACCESSORIES AND ATTACHMENTS NOT RECOMMENDED BY DELTA MAY RESULT IN RISK OF INJURIES.

Grinding wheels used with this grinder should be rated for 3600 RPM or higher and be 6" in diameter with a 1/2" arbor hole.

Two aluminum oxide grinding wheels are supplied with your grinder; one 36 grit and one 60 grit. For best grinding results, and to maintain good balance, always keep the wheels properly dressed. Do not force the work against a cold wheel. The grinding wheel should always be run at idle speed for one full minute before applying work. It is recommended that only balanced wheels be used with your grinder. The use of balanced wheels adds years to the life of the bearings on the grinder and by eliminating the most common source of vibration, more accurate work is accomplished.

DRESSING A GRINDING WHEEL

When dressing a grinding wheel use a suitable silicon carbide stick type dresser, as shown in Fig. 15. Bring the dresser forward on the tool rest until it just touches the high point of the face of the wheel and dress the wheel by moving the dresser back and forth. Repeat this operation until the face of the wheel is clean and the corners of the wheel are square. **ALWAYS** maintain a distance of 1/8" or less between the grinding wheel and the tool rest. Adjust the tool rests and spark guards as the grinding wheels decrease in size with use.

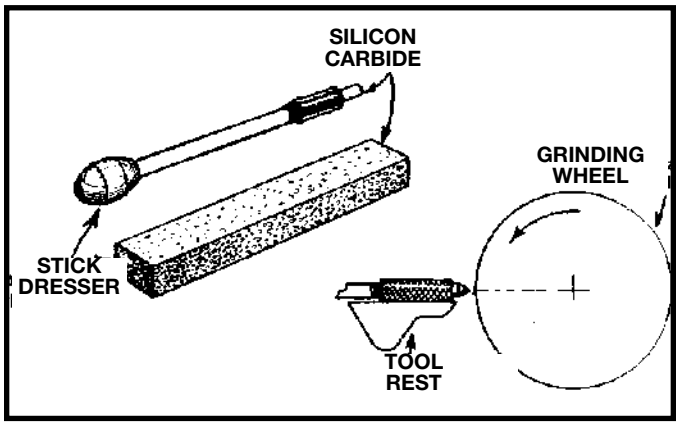


Fig. 15

CHANGING GRINDING WHEELS

⚠WARNING DISCONNECT MACHINE FROM POWER SOURCE.

1. When changing wheels, remove the screws attaching the side covers to the grinder and remove the side covers.
2. To prevent shaft rotation, place a wedge between the grinding wheel and the tool rest. **NOTE:** Facing the front of the grinder: To replace the wheel on the left side of the grinder, turn the arbor nut clockwise to loosen; counter-clockwise to tighten the arbor nut.
3. To replace the grinding wheel on the right, turn the arbor nut, counterclockwise to loosen; clockwise to tighten the arbor nut.
4. The arbor bushing should be saved, for future use, if the replacement wheel does not require the bushing.

⚠WARNING Do not overtighten wheel nuts when installing grinding wheels. Tighten wheel nut enough to drive the wheel and prevent slippage.

MAINTENANCE

KEEP MACHINE CLEAN

Periodically blow out all air passages with dry compressed air. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

⚠WARNING **Wear ANSI Z87.1 safety glasses while using compressed air.**

FAILURE TO START

Should your machine fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

LUBRICATION

Apply household floor paste wax to the machine table and extension table or other work surface weekly.

SERVICE

REPLACEMENT PARTS

When servicing use only identical replacement parts. Check the parts list included for more information. Parts lists can also be found online at www.deltamachinery.com.

SERVICE AND REPAIRS

All quality tools will eventually require servicing, or replacement of parts due to wear from normal use. For assistance with your tool, visit our website at www.deltamachinery.com for a list of service centers or call the Customer Care Department at 1-800-223-7278. All repairs made by our service centers are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by others. Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site **www.deltamachinery.com** for a catalog or for the name of your nearest supplier.

⚠WARNING Since accessories other than those offered by Delta have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.

WARRANTY

To register your tool for warranty service visit our website at www.deltamachinery.com.

Two Year Limited New Product Warranty

Delta will repair or replace, at its expense and at its option, any new Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. For all refurbished Delta product, the warranty period is 180 days. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.

Delta Machinery
4825 Highway 45 North
Jackson, TN 38305
1-800-223-7278
www.deltamachinery.com